

Serial Number: 10/089,928

CRF Processing Date: 5/2/02

Edited by: DC

Verified by: (STIC staff)

- ☐ Changed a file from non-ASCII to ASCII
- ☐ Changed the margins in cases where the sequence text was "wrapped" down to the next line.
- ☐ Edited a format error in the Current Application Data section, specifically: ENTERED
-
- ☐ Edited the Current Application Data section with the actual current number. The number inputted by the applicant was ☐ the prior application data; or ☐ other _____
- ☐ Added the mandatory heading and subheadings for "Current Application Data".
- ☐ Edited the "Number of Sequences" field. The applicant spelled out a number instead of using an integer.
- ☐ Changed the spelling of a mandatory field (the headings or subheadings), specifically: _____
-
- ☐ Corrected the SEQ ID NO when obviously incorrect. The sequence numbers that were edited were: _____
-
- ☐ Inserted or corrected a nucleic number at the end of a nucleic line. SEQ ID NO's edited: _____
-
- ☐ Corrected subheading placement. All responses must be on the same line as each subheading. If the applicant placed a response below the subheading, this was moved to its appropriate place.
- ☐ Inserted colons after headings/subheadings. Headings edited included: _____
-
- ☐ Deleted extra, invalid, headings used by an applicant, specifically: _____
-
- ☒ Deleted: ☒ non-ASCII "garbage" at the beginning/end of files; ☐ secretary initials/filename at end of file; ☐ page numbers throughout text; ☐ other invalid text, such as _____
- ☐ Inserted mandatory headings, specifically: _____
- ☐ Corrected an obvious error in the response, specifically: _____
-
- ☐ Edited identifiers where upper case is used but lower case is required, or vice versa.
- ☐ Corrected an error in the Number of Sequences field, specifically: _____
-
- ☐ A "Hard Page Break" code was inserted by the applicant. All occurrences had to be deleted.
- ☐ Deleted **ending** stop codon in amino acid sequences and adjusted the "(A)Length:" field accordingly (error due to a PatentIn bug). Sequences corrected: _____
- ☐ Other: _____
-
-
-

*Examiner: The above corrections must be communicated to the applicant in the first Office Action. DO NOT send a copy of this form.

3/1/95



PCT10

RAW SEQUENCE LISTING

DATE: 05/02/2002

PATENT APPLICATION: US/10/089,928

TIME: 09:34:26

Input Set : A:\PTO.DC.txt

Output Set: N:\CRF3\05022002\J089928.raw

```

3 <110> APPLICANT: Burton, Edward
4     Tinsley, Jonathan
5     Davies, Kay
7 <120> TITLE OF INVENTION: Utrophin Gene Promoter
9 <130> FILE REFERENCE: P02428US0
C--> 11 <140> CURRENT APPLICATION NUMBER: US/10/089,928
C--> 12 <141> CURRENT FILING DATE: 2002-04-04
14 <150> PRIOR APPLICATION NUMBER: PCT/GB00/03800
W--> 15 <151> PRIOR FILING DATE: 04/10/2000
17 <150> PRIOR APPLICATION NUMBER: GB 9923423.9
W--> 18 <151> PRIOR FILING DATE: 04/10/1999
20 <160> NUMBER OF SEQ ID NOS: 30
22 <170> SOFTWARE: PatentIn Ver. 2.1
24 <210> SEQ ID NO: 1
25 <211> LENGTH: 1197
26 <212> TYPE: DNA
27 <213> ORGANISM: Homo sapiens
29 <400> SEQUENCE: 1
30 tttctatttc acaacaagca agaaaaagaa tgagagaagg actagaaagt agatgtgatac 60
31 atatgaataa tgattttcct tgctttttgc atgtatgtgg tggacacatg cagaagtgc 120
32 agcaggagtt cgagaccagc ctgaccaaca tgggtgaaatc ccgtctctac taaacacaca 180
33 cacacacaca cacacacaca cacacacaca cacacacaca atagccgggc atgggtggtgg 240
34 gcacctgtaa tcccagctac ttgggaggct gaggcacaag aatgacttga acccaggagg 300
35 cggagggttg agtgagctga gatcatgcc a ttgactcca gcctgggtga cgagtga 360
36 aaaaataatg ataataaaga gagcaagggtg accacaaaag agaataaggct ggaaaaattt 420
37 gtctaaatgg tggcctcttc tcttatagct gcataatggtt aagtttattt tttccctagt 480
38 agcgaattct aagggatgaa gaagaaatcc ttttcagttt tacttcccc aagggtgtgat 540
39 aactactata gtgaaataat aagtcgaatt tattctttga agtatagtta atatgtaacg 600
40 aaactcctaa ggccagttgt ataccaggg caaacgcctt ctaacatctt tatttatcta 660
41 cgcagtgggt agggaggtgg gtggagtggc ccttccagc tgatactgtc aaaacaggaa 720
42 gcaaggttat aatctctgtc ataggaacat gaatagaggc ccttagttgt gactattaaa 780
43 aaaacaaaaa acctgcctaa ggagttttca ctgactacaa agtgtaactt cctctctggt 840
44 gtttagagga ggtggggtta ggtttagtca gatcctctca tgggaaaaat aaaagccacc 900
45 aaaaaaaaaa aaaaaaaaaa cccaaaataa cacaggacat cccagtgtgc agttcgaagg 960
46 ctgcttttgt tgtccacttc ctccacatct ttttctcat catctaagca gatgtagggt 1020
47 atgagcggcc tggcagccac cacgtttcat tggaaaaagt gcagattgga tttgccaggg 1080
48 catgtagctc tccaggcttg caagcgatta ccaggtaagt ttgtcaactt gcacgactcc 1140
49 cagccagtga ggttttctta agaaacgtct atgaagacag ggttctttca ttcagtt 1197
51 <210> SEQ ID NO: 2
52 <211> LENGTH: 32
53 <212> TYPE: PRT
54 <213> ORGANISM: Homo sapiens
56 <400> SEQUENCE: 2

```

RAW SEQUENCE LISTING

DATE: 05/02/2002

PATENT APPLICATION: US/10/089,928

TIME: 09:34:26

Input Set : A:\PTO.DC.txt

Output Set: N:\CRF3\05022002\J089928.raw

57 Met Ser Gly Leu Ala Ala Thr Thr Phe His Trp Lys Lys Cys Arg Leu
 58 1 5 10 15
 60 Asp Leu Pro Gly His Val Ala Leu Gln Ala Cys Lys Arg Leu Pro Asp
 61 20 25 30

63 <210> SEQ ID NO: 3

64 <211> LENGTH: 1145

65 <212> TYPE: DNA

66 <213> ORGANISM: Mus sp.

68 <220> FEATURE:

69 <221> NAME/KEY: misc_feature

70 <222> LOCATION: (120)

71 <223> OTHER INFORMATION: n = a or g or c or t

73 <220> FEATURE:

74 <221> NAME/KEY: misc_feature

75 <222> LOCATION: (568)

76 <223> OTHER INFORMATION: n = a or g or c or t

78 <400> SEQUENCE: 3

79 tactacgtgg gttatagcag taaactgggt tttgactaag tgacatgact ggagccattc 60
 W--> 80 **tgattcttta ctgtctcacc ccattcttatt ccgttggagg atgaggatca gaggacagan** 120
 81 tgcttagttg ttttttccag agtctcaagt ctatgggtctt ctgagctaca tagataggtt 180
 82 ccttttactt ggaactcctg tggaccctgg tagggttaca tattctgtga gaatctttgt 240
 83 gctaggtacg gattctgttt cagaggagga aagaaagcta ttagatccat actaaggatg 300
 84 caggcatggc agtacaaaca cctttccttc tcttttgcac gtgtgtggag aacacatatg 360
 85 caaatgatgt caagagaaca aaacaaccat ctaaaacaga agtctggaaa atatgagtct 420
 86 gtgtggttat tgtttttttc caccgtagca gtttctttct cttttccttt gtggtttttg 480
 87 gagacagggg ttctctatgt agccctggct gtcttggagc ttacactgta gaccaggctg 540
 W--> 88 **gccttgaact cacagagatc caccctgctc tgccctcctgt gtgggagtaa aggcgtgtac** 600
 89 caccacaaa gtaaacactg ttgtgagtat gcatagtggg gtgtgtgtgt gtgtgtgtgc 660
 90 tgtcagacac catcaaaca gaaaagttag catctctcta gttgcttttg aacattcaaa 720
 91 agctctaagc tgtgactatt aaaaaccaa agtacctcaa gagttcttaa ctgactgcgg 780
 92 agtttaactt cctgtctgag gggagtggg gtttagattta gtcagatcct ctcgtgggaa 840
 93 aaaatcaaag ggactttaaa aaagaaaaaa acaaaaccca acctaacagg acatcccagt 900
 94 gtgcagttcg cgggcggctt ttgtgttgat ttccctcaca gtttccctca tctcagccac 960
 95 tgtaggtgat gagcagcctg gcagccacca catttcgttg gaaaaagtgg aggttggatc 1020
 96 tgccctgggca ggtgcctctc caggcttgca ggagatcccc cggttaagttt gtcagtggcc 1080
 97 agactgcagt tgctaaggga ggctttggac agagggtgtt cgagttggca gagcctcact 1140
 98 ttctc 1145

101 <210> SEQ ID NO: 4

102 <211> LENGTH: 32

103 <212> TYPE: PRT

104 <213> ORGANISM: Mus sp.

106 <400> SEQUENCE: 4

107 Met Ser Ser Leu Ala Ala Thr Thr Phe Arg Trp Lys Lys Trp Arg Leu
 108 1 5 10 15
 110 Asp Leu Pro Gly Gln Val Pro Leu Gln Ala Cys Arg Arg Ser Pro Asp
 111 20 25 30

114 <210> SEQ ID NO: 5

115 <211> LENGTH: 1500

116 <212> TYPE: DNA

RAW SEQUENCE LISTING

DATE: 05/02/2002

PATENT APPLICATION: US/10/089,928

TIME: 09:34:26

Input Set : A:\PTO.DC.txt

Output Set: N:\CRF3\05022002\J089928.raw

117 <213> ORGANISM: Homo sapiens

119 <400> SEQUENCE: 5

```

120 cccagtgtgc agttcgaagg ctgcttttgt tgtccacttc ctccacatct ttttcctcat 60
121 catctaagca gatgtagggtg atgagcgccc tggcagccac cacgtttcat tggaaaaagt 120
122 gcagattgga tttgccaggg catgtagctc tccaggcttg caagcgatta ccagatgaac 180
123 acaatgacgt acagaagaaa acctttacca aatggataaa tgctcgattt tcaaagagt 240
124 ggaaaccacc catcaatgat atgttcacag acctcaaaga tggaaaggaag ctattggatc 300
125 ttctagaagg cctcacagga acatcactgc caaaggaacg tggttccaca agggtagatg 360
126 ccttaataaa cgtcaacaga gtgctgcagg ttttacatca gaacaatgtg gaattagtga 420
127 atataggggg aactgacatt gtggatggaa atcacaaact gactttgggg ttactttgga 480
128 gcatcatttt gcactggcag gtgaaagatg tcatgaagga tgcattgtcg gacctgcagc 540
129 agacgaacag tgagaagatc ctgctcagct ggggtgcgtc gaccaccagg ccctacagcc 600
130 aagtcaacgt cctcaacttc accaccagct ggacagatgg actcgctttt aatgctgtcc 660
131 tccaccgaca taaacctgat ctcttcagct gggataaagt tgcataaatg tcaccaattg 720
132 agagacttga acatgccttc agcaaggctc aaacttattt gggattgaa aagctgttag 780
133 atcctgaaga tgttgccgtt cggcttcctg acaagaaatc cataattatg tatttaacat 840
134 ctttgtttga ggtgctacct cagcaagtca ccatagacgc catccgtgag gtagagacac 900
135 tcccaggaa atataaaaaa gaatgtgaag aagaggcaat taatatacag agtacagcgc 960
136 ctgaggagga gcatgagagt ccccgagctg aaactccag cactgtcact gaggtcgaca 1020
137 tggatctgga cagctatcag attgcgttgg aggaagtgtc gacctggttg ctttctgctg 1080
138 aggacaacttt ccaggagcag gatgatattt ctgatgatgt tgaagaagtc aaagaccagt 1140
139 ttgcaaccca tgaagctttt atgatggaac tgactgcaca ccagagcagt gtgggcagcg 1200
140 tctgcaggc aggaaccaa ctgataacac aaggaactct gtcagacgaa gaagaatttg 1260
141 agattcagga acagatgacc ctgctgaatg ctgatggga ggctcttagg gtggagagta 1320
142 tggacagaca gtcccggctg cagcatgtgc tgatggaact gcagaagaag caactgcagc 1380
143 agctctccgc ctggttaaca ctacagagg agcgcattca gaagatggaa acttgcccc 1440
144 tggatgatga tgtaaaactc ctacaaaagc tgctagaaga acataaaagt ttgcaaagt 1500

```

147 <210> SEQ ID NO: 6

148 <211> LENGTH: 1500

149 <212> TYPE: DNA

150 <213> ORGANISM: Homo sapiens

152 <400> SEQUENCE: 6

```

153 cactttgcaa acttttatgt tcttctagca gctttttag agattttaca tcatcatcca 60
154 gggggcaagt ttccatcttc tgaatgcgct cctctgtgag tgttaaccag gggagagct 120
155 gctgcagttg cttctcttgc agttccatca gcacatcgtg cagccgggac tgtctgtcca 180
156 tactctccac cctaagagcc tcccatctag cattcagcag ggtcatctgt tctgaatct 240
157 caaattcttc ttctgtctgac agagttcctt gtgttatcag ttggttgcc tgcctgcagga 300
158 cgtgcccac actgctcttg tgtgcagtca gttccatcat aaaagcttca tgggttgcaa 360
159 actggtcttt gacttcttca acatcatcag aaatatcatc ctgctcctgg aaagtgtcct 420
160 cagcagaaag caaccaggtc agcacttcc ccaacgcaat ctgatagctg tccagatcca 480
161 tgtcgacctc agtgacagtg ctgggagttt cagctcgggg actctcatgc tctcctcag 540
162 gcgctgtact ctgtatatta attgcctctt ctccacattc ttttttatat ttcttggga 600
163 gtgtctctac ctacggatg gcgtctatgg tgacttgctg aggtagcacc tcaaacaaag 660
164 atgttaataa cataattatg gatttcttgt cagggaagccg aacggcaaca tcttcaggat 720
165 ctaacagctt ttcaattccc aaataagttt gagccttgct gaaggcatgt tcaagtctct 780
166 caattggtga ctttttgaca actttatccc agctgaagag atcaggttta tgtcgttgga 840
167 ggacagcatt aaaggcaggt ccatctgtcc agctggtggt gaagttgagg acgttgactt 900
168 ggctgtaggg cctggtggtc tgacgcaccc agctgagcag gatcttctca ctgttcgtct 960
169 gctgcaggtc cgacatgaca tccttcatga catctttcac ctgccagtgc aaaatgatgc 1020

```

RAW SEQUENCE LISTING

DATE: 05/02/2002

PATENT APPLICATION: US/10/089,928

TIME: 09:34:26

Input Set : A:\PTO.DC.txt

Output Set: N:\CRF3\05022002\J089928.raw

```

170 tccaaagtaa ccccaaagtc agtttgtgat ttccatccac aatgtcagtt ccccctatat 1080
171 tcactaattc cacattgttc tgatgtaaaa cctgcagcac tctgttgacg ttatttaagg 1140
172 catgtaccct tgtggaacca cgttcctttg gcagtgatgt tcctgtgagg ccttctagaa 1200
173 gatccaatag cttccttcca tctttgaggt ctgtgaacat atcattgatg ggtggttcc 1260
174 cactctttga aaatcgagca tttatccatt tggtaaagggt tttcttctgt acgtcattgt 1320
175 gttcatctgg taatcgcttg caagcctgga gagctacatg ccctggcaaa tccaatctgc 1380
176 actttttcca atgaaacgtg gtggctgccg gccgctcat cacctacatc tgcttagatg 1440
177 atgaggaaaa agatgtggag gaagtggaca acaaaagcag ccttcgaact gcacactggg 1500
184 <210> SEQ ID NO: 7
185 <211> LENGTH: 474
186 <212> TYPE: PRT
187 <213> ORGANISM: Homo sapiens
189 <400> SEQUENCE: 7
190 Met Ser Gly Leu Ala Ala Thr Thr Phe His Trp Lys Lys Cys Arg Leu
191 1 5 10 15
193 Asp Leu Pro Gly His Val Ala Leu Gln Ala Cys Lys Arg Leu Pro Asp
194 20 25 30
196 Glu His Asn Asp Val Gln Lys Lys Thr Phe Thr Lys Trp Ile Asn Ala
197 35 40 45
199 Arg Phe Ser Lys Ser Gly Lys Pro Pro Ile Asn Asp Met Phe Thr Asp
200 50 55 60
202 Leu Lys Asp Gly Arg Lys Leu Leu Asp Leu Leu Glu Gly Leu Thr Gly
203 65 70 75 80
205 Thr Ser Leu Pro Lys Glu Arg Gly Ser Thr Arg Val His Ala Leu Asn
206 85 90 95
208 Asn Val Asn Arg Val Leu Gln Val Leu His Gln Asn Asn Val Glu Leu
209 100 105 110
211 Val Asn Ile Gly Gly Thr Asp Ile Val Asp Gly Asn His Lys Leu Thr
212 115 120 125
214 Leu Gly Leu Leu Trp Ser Ile Ile Leu His Trp Gln Val Lys Asp Val
215 130 135 140
217 Met Lys Asp Val Met Ser Asp Leu Gln Gln Thr Asn Ser Glu Lys Ile
218 145 150 155 160
220 Leu Leu Ser Trp Val Arg Gln Thr Thr Arg Pro Tyr Ser Gln Val Asn
221 165 170 175
223 Val Leu Asn Phe Thr Thr Ser Trp Thr Asp Gly Leu Ala Phe Asn Ala
224 180 185 190
226 Val Leu His Arg His Lys Pro Asp Leu Phe Ser Trp Asp Lys Val Val
227 195 200 205
229 Lys Met Ser Pro Ile Glu Arg Leu Glu His Ala Phe Ser Lys Ala Gln
230 210 215 220
232 Thr Tyr Leu Gly Ile Glu Lys Leu Leu Asp Pro Glu Asp Val Ala Val
233 225 230 235 240
235 Arg Leu Pro Asp Lys Lys Ser Ile Ile Met Tyr Leu Thr Ser Leu Phe
236 245 250 255
238 Glu Val Leu Pro Gln Gln Val Thr Ile Asp Ala Ile Arg Glu Val Glu
239 260 265 270
241 Thr Leu Pro Arg Lys Tyr Lys Lys Glu Cys Glu Glu Glu Ala Ile Asn
242 275 280 285

```

RAW SEQUENCE LISTING

PATENT APPLICATION: US/10/089,928

DATE: 05/02/2002

TIME: 09:34:26

Input Set : A:\PTO.DC.txt

Output Set: N:\CRF3\05022002\J089928.raw

```

244 Ile Gln Ser Thr Ala Pro Glu Glu Glu His Glu Ser Pro Arg Ala Glu
245      290      295      300
247 Thr Pro Ser Thr Val Thr Glu Val Asp Met Asp Leu Asp Ser Tyr Gln
248 305      310      315      320
250 Ile Ala Leu Glu Glu Val Leu Thr Trp Leu Ser Ala Glu Asp Thr
251      325      330      335
253 Phe Gln Glu Gln Asp Asp Ile Ser Asp Asp Val Glu Glu Val Lys Asp
254      340      345      350
256 Gln Phe Ala Thr His Glu Ala Phe Met Met Glu Leu Thr Ala His Gln
257      355      360      365
259 Ser Ser Val Gly Ser Val Leu Gln Ala Gly Asn Gln Leu Ile Thr Gln
260      370      375      380
262 Gly Thr Leu Ser Asp Glu Glu Glu Phe Glu Ile Gln Glu Gln Met Thr
263 385      390      395      400
265 Leu Leu Asn Ala Arg Trp Glu Ala Leu Arg Val Glu Ser Met Asp Arg
266      405      410      415
268 Gln Ser Arg Leu His Asp Val Leu Met Glu Leu Gln Lys Lys Gln Leu
269      420      425      430
271 Gln Gln Leu Ser Ala Trp Leu Thr Leu Thr Glu Glu Arg Ile Gln Lys
272      435      440      445
274 Met Glu Thr Cys Pro Leu Asp Asp Val Lys Ser Leu Gln Lys Leu
275      450      455      460
277 Leu Glu Glu His Lys Ser Leu Gln Ser Asp
278 465      470
281 <210> SEQ ID NO: 8
282 <211> LENGTH: 6059
283 <212> TYPE: DNA
284 <213> ORGANISM: Artificial Sequence
286 <220> FEATURE:
287 <221> NAME/KEY: CDS
288 <222> LOCATION: (11)..(6052)
290 <220> FEATURE:
291 <223> OTHER INFORMATION: Description of Artificial Sequence: Utrophin B
292      isoform "minigene"
294 <400> SEQUENCE: 8
295 actagtcaag atg agc ggc ctg gca gcc acc acg ttt cat tgg aaa aag      49
296      Met Ser Gly Leu Ala Ala Thr Thr Phe His Trp Lys Lys
297      1      5      10
299 tgc aga ttg gat ttg cca ggg cat gta gct ctc cag gct tgc aag cga      97
300 Cys Arg Leu Asp Leu Pro Gly His Val Ala Leu Gln Ala Cys Lys Arg
301      15      20      25
303 tta cca gat gaa cac aat gat gta cag aag aaa acc ttt acc aaa tgg      145
304 Leu Pro Asp Glu His Asn Asp Val Gln Lys Lys Thr Phe Thr Lys Trp
305      30      35      40      45
307 ata aac gct cga ttt tcc aag agt ggg aaa cca ccc atc agt gat atg      193
308 Ile Asn Ala Arg Phe Ser Lys Ser Gly Lys Pro Pro Ile Ser Asp Met
309      50      55      60
311 ttc tca gac ctc aaa gat ggg aga aag ctc ttg gat ctt ctc gaa ggc      241
312 Phe Ser Asp Leu Lys Asp Gly Arg Lys Leu Leu Asp Leu Leu Glu Gly

```

RAW SEQUENCE LISTING ERROR SUMMARY DATE: 05/02/2002
PATENT APPLICATION: US/10/089,928 TIME: 09:34:27

Input Set : A:\PTO.DC.txt
Output Set: N:\CRF3\05022002\J089928.raw

Please Note:

Use of n and/or Xaa have been detected in the Sequence Listing. Please review the Sequence Listing to ensure that a corresponding explanation is presented in the <220> to <223> fields of each sequence which presents at least one n or Xaa.

Seq#:3; N Pos. 120,568

VERIFICATION SUMMARY

PATENT APPLICATION: US/10/089,928

DATE: 05/02/2002

TIME: 09:34:27

Input Set : A:\PTO.DC.txt

Output Set: N:\CRF3\05022002\J089928.raw

L:11 M:270 C: Current Application Number differs, Replaced Current Application Number
L:12 M:271 C: Current Filing Date differs, Replaced Current Filing Date
L:15 M:256 W: Invalid Numeric Header Field, Wrong Prior FILING DATE:YYYY-MM-DD
L:18 M:256 W: Invalid Numeric Header Field, Wrong Prior FILING DATE:YYYY-MM-DD
L:80 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:3 after pos.:60
L:88 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:3 after pos.:540